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Miscellaneous Publication No. 83

Directory
of
Field Activities
of the
Bureau of Entomology

Issued July, 1936

United States
Department of Agriculture
Bureau of Entomology

Organization of the Bureau of Entomology

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Cotton Insects.—B. R. COAD, Principal Entomologist, in charge.

Forest Insects.—F. C. CRAIGHEAD, Principal Entomologist, in charge.

Truck-Crop Insects.—J. E. GRAF, Principal Entomologist, in charge.

Bee Culture.—JAS. I. HAMBLETON, Senior Apiculturist, in charge.

Stored-Product Insects.—E. A. BACK, Principal Entomologist, in charge.

Tropical, Subtropical, and Ornamental-Plant Insects.—A. C. BAKER, Principal Entomologist, in charge.

Insects Affecting Man and Animals.—F. C. BISHOPP, Principal Entomologist, in charge.

Taxonomy and Interrelations of Insects.—C. L. MARLATT, Chief of Bureau, acting in charge.

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United States
Government Printing Office
Washington : 1930

THE ACTIVITIES of the Bureau of Entomology are primarily devoted to research concerning insects in their economic relations. The work includes a study of insects injurious to crops and crop products and the development of methods for their eradication or control, a study of those affecting the health of livestock and of man, and those infesting human habitations or injurious to our industries. It includes also a study of beneficial insects, both those forming the basis of certain industries or on which more limited industrial processes depend and those which may be utilized as insect-controlling agencies in the solution of agricultural problems. With the exception of the research on taxonomy, the work of the insect pest survey, and that of a few technical laboratories, all of the activities of the bureau other than those of administration are conducted in the field. Much of the field investigational work is done in cooperation with the State agricultural experiment stations.

For convenience in the administration of its various activities the bureau is divided into several major subdivisions which are shown on pages 1 to 4, together with the field of activity of each.

MAJOR DIVISIONS OF BUREAU

DECIDUOUS-FRUIT INSECTS

Investigation of, and development of control measures for, insects injurious to deciduous fruits, including nuts, grapes, and certain small fruits and also research on Japanese and Asiatic beetles. Field laboratories are maintained in the principal fruit-growing districts of the country.

CEREAL AND FORAGE INSECTS

Investigations of the insects affecting cereal and forage crops, including sugarcane and rice. Also the research work on the European corn borer and the conduct of a control campaign directed against the Mormon cricket in Colorado. The service provided by this work is distributed throughout practically all of the important corn, small grain, and forage producing States. It also provides for the collection and introduction of the parasitic enemies of introduced cereal and forage insect pests from Europe, Asia, and South America.

COTTON INSECTS

Investigations of the boll weevil, cotton flea hopper, pink bollworm, bollworm or corn ear worm, and Thurberia weevil. A number of other insect pests of cotton are also investigated in connection with local or more widespread infestations. Experiments are conducted in dusting cotton by airplane for insect control for the purpose of perfecting types of hoppers and for the study of the behavior of the dust cloud under

varying conditions. New types of machines for dusting cotton from the ground are also being tested.

FOREST INSECTS

Investigations of the insects that injure forest, shade, and ornamental trees, shrubs, and crude and finished forest products. These include bark beetles, leaf-eating insects, insects that bore into living or dead trees or logs, and also those that damage lumber and wood that has already been put into manufactured articles or buildings. Special studies are being made of the gipsy moth, the brown-tail moth, and the satin moth and the parasites and predatory insect enemies that aid in their control.

TRUCK-CROP INSECTS

Investigations of, and the development of remedies for, insect pests of truck and garden crops, including peas, beans, potatoes, sweetpotatoes, cabbages, etc., and such related crops as strawberries, raspberries, blackberries, and also sugar beets, and tobacco. The European earwig, the pests of cultivated mushrooms, soil insects such as wireworms, and the spider mites attacking vegetable and related crops are also included in the work of this division.

BEE CULTURE

Investigations on the management of bees to make the production of honey and wax more profitable, and to facilitate the pollination of fruits and forage plants by the use of honeybees.

STORED-PRODUCT INSECTS

Investigations of the activities of, and possible control measures for, the various insects that attack grain and grain products, beans, dried

fruits, and other foods in storage, and also those that infest manufacturing plants, warehouses, and dwellings, and that injure hides, clothing, carpets, tapestries, upholstering, etc. In cooperation with the Bureau of Chemistry and Soils special studies are being made of fumigants for stored-product insects.

TROPICAL, SUBTROPICAL, AND ORNAMENTAL-PLANT INSECTS

Investigations of the insect pests affecting citrus, avocado, mango, guava, loquat, date, and other subtropical fruits, together with the pests affecting various ornamental plants grown both in the greenhouse and out of doors. The research is concerned with the habits and development of these insects and the determination of methods which may be used by growers in controlling the pests which affect their crops. Especial attention is given to citrus insects, the Parlatoria date scale, and to fruit flies in Mexico, the Canal Zone, and Hawaii that might be introduced into the United States.

INSECTS AFFECTING MAN AND ANIMALS

Investigations of the insect pests of farm and range animals, poultry, and pets, and those that attack human beings, including malaria-carrying mosquitoes; and the study of methods for controlling or eradicating these pests. Special studies are now being made of screw worms, cattle grubs, the sheep scab mite and goat louse, and eye gnats.

TAXONOMY AND INTERRELATIONS OF INSECTS

The work of this division deals chiefly with the important fundamental problems of insect identity, distribution, and behavior, and of the more general interrelations among insects and

between insects and their environment. It also involves the maintenance of a survey unit which reports from month to month the existence and progress of outbreaks of injurious insects. Much of the work of the division is of a highly specialized service character, as it involves the supplying of technical information on the identity and habits of insects to investigators of entomological problems throughout the Federal service and in State organizations, universities, and colleges in this country, to similar investigators throughout the world, and to numerous quarantine officials.

FIELD ACTIVITIES OF BUREAU

ALASKA

Nome

United States Entomological Laboratory (cooperation with the Territorial government).

Investigations of reindeer bots. E. C. Cushing, assistant entomologist, in charge.

ARIZONA

Prescott

United States Entomological laboratory (cooperation with Federal Forest Service, National Park Service, and Office of Indian Affairs, with State forestry departments of California and Oregon, and with organizations of private owners of forest land).—Located at the Forest Service headquarters.

Investigations of tree-killing bark beetles and forest defoliators. M. W. Blackman, senior entomologist, in charge.

Tempe

United States Entomological Laboratory (cooperation with Arizona and Utah Agricultural Experiment Stations).—Located at 415 East Eighth Street, one square east of the campus of the State teachers' college.

Biological investigations of the southwestern corn borer, corn root aphid, alfalfa seed chalcid, alfalfa caterpillar, and range caterpillar with experimental control work. V. L. Wildermuth, entomologist, in charge.

United States Entomological Sublaboratory.—Desk space in the cereal and forage laboratory at 415 East Eighth Street.

Biological and control studies of the tobacco stalk borer. K. B. McKinney, assistant entomologist, in charge; mail address, Box 352, or address A. C. Morgan, Box 346, Clarksville, Tenn.

Tucson

United States Entomological Sublaboratory.—Located in the Federal Building.

Investigations of the Thurberia weevil with reference to the distribution of the native host plant, and its menace to the cotton-growing industry of Arizona. T. P. Cassidy, entomologist, in charge; or address B. R. Coad, United States Entomological Laboratory, Tallulah, La.

ARKANSAS

Bentonville

United States Entomological Laboratory (cooperation with the Arkansas Agricultural Experiment Station).—Located at 1420 South Main Street. Bentonville is on a branch of the Frisco Lines, 6 miles from Rogers, Ark. The best way to reach Bentonville is to take an

automobile at Rogers. There are hotel accommodations at Bentonville.

Investigations of apple insects, especially the codling moth and apple leaf hoppers, including control experiments. A. J. Ackerman, entomologist, in charge.

CALIFORNIA

Alhambra

United States Entomological Laboratory.—Located at 200 South Third Street. The laboratory may be reached by interurban cars from Los Angeles, the cars running within two blocks. Telephone, Alhambra 1056.

Biological and control investigations of the pea aphid, and control studies of wireworms affecting beans and potatoes, and the vegetable weevil investigations at San Jose, Calif. R. E. Campbell, entomologist, in charge; mail address, Box 297.

Berkeley

United States Entomological Laboratory (cooperation with Federal Forest Service, National Park Service, and Office of Indian Affairs, with State forestry departments of California and Oregon, and with organizations of private owners of forest land).—Located at room 113 Hilgard Hall, University of California.

Investigations of the western pine beetle and methods of control. H. L. Person, assistant entomologist, in charge.

Coachella

United States Entomological Laboratory.—Located at the trading post. On Southern Pacific Railway. Limited trains stop at Indio, 3 miles west.

Investigations of the eye gnat (*Hippelates* spp.). D. G. Hall, assistant entomologist, in charge of laboratory; R. W. Burgess, agent, in charge of field experiments. Investigations under supervision of D. C. Parman, Uvalde, Tex.

Fresno

United States Entomological Laboratory (cooperation with the Dried Fruit Association of California).—To reach the laboratory, if arriving at Fresno via the Southern Pacific Lines, take the car marked either "Roeding Park" or "Wishon Avenue—State College," leave the car at Elizabeth Street, and walk two blocks to the left to 712 Elizabeth Street. If arriving via the Atchison, Topeka & Santa Fe Railway, take car marked either "McKenzie Avenue" or "S. P. Station," transfer at the Southern Pacific station, and continue trip as previously indicated.

Investigations of insects destructive to dried fruits on the farm, in the packing house, and in the warehouse, especially the Indian-meal moth, the fig moth, and the dried-fruit beetle. Perez Simmons, entomologist, in charge.

Indio

United States Entomological Sublaboratory (cooperation with the Plant Quarantine and Control Administration and the Federal Bureau of Plant Industry).—A branch of the Whittier (Calif.) laboratory. Location may be learned by inquiry at the Government date gardens.

Investigations of the date-palm scale. F. S. Stickney, associate entomologist, in charge.

Lindsay

United States Entomological Sublaboratory.—A branch of the Whittier (Calif.) laboratory. Located at the intersection of Homassel Avenue and Hermosa Street.

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Investigations of the citrus thrips and the citricola scale in central California. E. A. McGregor, associate entomologist, in charge.

Modesto

United States Entomological Laboratory.—Located at 1218 I Street.

Investigation of the bean weevil and the southern cowpea weevil; field control conducted in cooperation with the Bean Growers' Association of California and the bean weevil committees of farm bureaus in bean-growing areas. C. K. Fisher, assistant entomologist, in charge; mail address, Box 297.

Palo Alto

United States Entomological Laboratory (cooperation with Federal Forest Service, National Park Service, and Office of Indian Affairs, with State Forestry Departments of California and Oregon, and with organizations of private owners of forest land).—Located at Leland Stanford Junior University. The university is about 2 miles from the Palo Alto railroad station and may be reached by trolley.

Investigation of the mountain pine beetle, western pine beetle, Pandora moth, and lodgepole needle miner and methods for their control. J. M. Miller, senior entomologist, in charge.

Riverside

United States Entomological Sublaboratory (cooperation with the California Citrus Experiment Station).—Located at the experiment station.

Investigations of the sugar-beet leaf hopper in relation to vegetable crops. H. E. Wallace, associate entomologist, in charge; mail address, Box 703; or address P. N. Annand, Box 1100, Twin Falls, Idaho.

Sacramento

United States Entomological Laboratory (cooperation with Agricultural Experiment Station of the University of California and with the Federal Bureaus of Plant Industry and Public Roads).—Located at 600 Twenty-sixth Street.

Investigations of the Hessian fly, alfalfa aphids, grasshoppers, and other important cereal and forage insects. R. A. Blanchard, associate entomologist, in charge.

San Jose

United States Entomological Laboratory (cooperation with the University of California Experiment Station).—Located at the University of California Field Station.

Investigations of the development of the vegetable weevil and of methods for its control. Address O. H. Lovell, agent, or R. E. Campbell, Box 297, Alhambra, Calif.

Santa Ana

United States Entomological Sublaboratory.—Located at 2005 Cypress Street.

Biological and control investigations of the pepper weevil. J. C. Elmore, assistant entomologist, in charge; mail address, Box 35; or address R. E. Campbell, Box 297, Alhambra, Calif.

Whittier

United States Entomological Laboratory (cooperation with the Plant Quarantine and Control Administration, the California Citrus League, and Whittier College).—Located at 724 Earlham Drive.

A regional laboratory devoted to the problems of insect attack on subtropical fruits and ornamental plants in the Southwest. Investigations

of special problems as follows: Resistant scale and general problem analysis; the narcissus fly, the lesser bulb flies, and insects attacking ornamental plants; and field control of the citrus thrips and the citricola scale; under the direction, respectively, of C. I. Bliss, entomologist, F. R. Cole, associate entomologist, and E. A. McGregor, associate entomologist.

CANAL ZONE

Ancon

United States Entomological Laboratory.—Located in Building No. 0902 Amador Road, Balboa.

Investigations of American fruit flies and other tropical insects. Tests of the effectiveness of chemicals and treated wood against termites. James Zetek, associate entomologist, in charge.

CUBA

Santiago de las Vegas

United States Entomological Laboratory (cooperation with the Sanidad Vegetal and the Estacion Experimental Agronomica, Secretaria de Agricultura, Comercio y Trabajo).—Located on the grounds of the Estacion Experimental Agronomica.

Rearing and colonization of parasites and predators of the citrus black fly. P. A. Berry, junior entomologist, acting in charge.

FEDERATED MALAY STATES

Kuala Lumpur

United States Entomological Laboratory (cooperation with the Sanidad Vegetal and the Estacion Experimental Agronomica, Secretaria de Agricultura, Comercio y Trabajo of Cuba).—Direc-

tions for reaching the laboratory may be obtained at the Empire Hotel.

Investigations on, and rearing for shipment of, parasites and predators of the citrus black fly and the citrus white fly. C. P. Clausen, senior entomologist, in charge.

FLORIDA

Orlando

United States Entomological Laboratory (cooperation with the Federal Bureau of Plant Industry and the Plant Quarantine and Control Administration).—Located at the northwest corner of the fair grounds, near West Amelia and Parramore Streets, 1 mile from railroad station.

A regional laboratory devoted to a study of the insect problems of subtropical fruits and ornamental plants in the Southeast. Investigations of parasites of citrus insects and studies on insecticides. W. W. Yothers, entomologist, in charge.

Quincy

United States Entomological Sublaboratory.—Located at 104 Washington Strect, one block west of the courthouse. Telephone 347.

Investigations of methods of control of insects affecting tobacco in the southern cigar-wrapper district. F. S. Chamberlin, assistant entomologist, in charge; mail address, Box 239, Quincy; or address A. C. Morgan, United States Entomological Laboratory, Box 346, Clarksville, Tenn.

Sanford

United States Entomological Laboratory (cooperation with the State Plant Board and the Florida Agricultural Experiment Station).—Has quarters in the courthouse. Telephone 47.

Investigations of the biology and control of celery pests, especially the celery leaf tier. C. F. Stahl, entomologist, in charge; mail address, Box 549.

Zellwood

United States Entomological Laboratory.—Located on the Laughlin estate (inquire at Zellwood Inn).

Investigations of mosquitoes, especially *Mansonia* spp. T. E. McNeel, junior entomologist, in charge.

FRANCE

Antibes

United States Entomological Laboratory.—Located at Villa mon Toit, Chemin du Tamisier.

Investigations of parasites of the oriental fruit moth. G. J. Haeussler, assistant entomologist, in charge.

Hyères

United States Entomological Laboratory.—Hyères is on the Mediterranean Sea a few miles east of Toulon, in the Department of Var. The laboratory is in the suburbs.

Investigations of parasites of the European corn borer and alfalfa weevil, with incidental work on the parasites of other important European pests that have become established in the United States. H. L. Parker, entomologist, in charge.

GEORGIA

Albany

United States Entomological Laboratory (cooperation with Federal Bureaus of Plant Industry and Chemistry and Soils).—Located on fairgrounds, corner of North Jefferson and Eighth Streets.

Headquarters for investigations of pecan insects, especially the pecan nut case-bearer, pecan leaf case-bearer, and pecan black aphid and studies of insecticides. G. F. Moznette, entomologist, in charge.

Cornelia

United States Entomological Laboratory (cooperation with Georgia State Board of Entomology).—Located facing Banks Street.

Investigations of bait traps for the oriental fruit moth. L. F. Steiner, assistant entomologist, in charge.

Experiment

United States Entomological Sublaboratory (cooperation with Georgia Experiment Station).—Located at the experiment station.

Investigations of the pecan weevil and other pecan insects. T. L. Bissell, assistant entomologist, in charge.

Fort Valley

United States Entomological Laboratory (cooperation with Federal Bureau of Plant Industry and State Board of Entomology).—Located on Church Street. Hotel accommodations may be had at Fort Valley.

Investigations of the plum curculio, peach borers, San Jose scale, and other peach insects. O. I. Snapp, entomologist, in charge.

Savannah

United States Entomological Sublaboratory.

Investigations of the corn ear worm. G. W. Barber, associate entomologist, in charge; mail address, Box 553; or address W. J. Phillips, United States Entomological Laboratory, Charlottesville, Va.

Thomasville

United States Entomological Laboratory.—Located in the post office building.

Studies of field conditions governing the abundance of corn weevils on southern farms and of methods of control, in cooperation with State and county agents. S. E. McClendon, assistant entomologist, in charge; address, 304 Young Street.

HAWAII

Honolulu

United States Entomological Laboratory (cooperation with the Plant Quarantine and Control Administration).—Located on the grounds of the Territorial Board of Agriculture and Forestry, corner of King and Keeaumoku Streets.

Investigations of parasitism and control of the Mediterranean fruit fly, its seasonal history, and its physiology, under the direction of O. C. McBride, entomologist, A. C. Mason, associate entomologist, M. McPhail, assistant entomologist, and W. H. Mitchel, agent in physiology, respectively.

HUNGARY

Budapest

United States Entomological Laboratory.—Located at Kapy utca 21.

Collection and shipment of parasites of the gipsy moth and the brown-tail moth. P. B. Dowden, associate entomologist, in charge.

IDAHO

Coeur d'Alene

United States Entomological Laboratory (cooperation with Federal Forest Service, National Park Service, and Office of Indian Affairs,

with State Forestry Department of Idaho, and with organizations of private owners of forest land).—Within five minutes' walking distance from the railroad station.

Investigations of the mountain pine beetle, western pine beetle, spruce bud worm, fir tussock moth, and hemlock looper and methods of control. J. C. Evenden, entomologist, in charge.

Parma

United States Entomological Sublaboratory.

Investigations of wireworms. H. P. Lanchester, junior entomologist, in charge; mail address, Box 193; or address M. C. Lane, Box 616, Walla Walla, Wash.

Twin Falls

United States Entomological Laboratory (*cooperation with Idaho, Utah, Montana, Oregon, and California Agricultural Experiment Stations and Federal Bureau of Plant Industry*).—Located on Blue Lakes Boulevard.

Investigations of the sugar-beet leaf hopper, including its parasites, development, control, and ecology. P. N. Annand, entomologist, in charge; mail address, Box 1100.

ILLINOIS

Galesburg

United States Entomological Laboratory (*cooperation with Federal Bureau of Animal Industry*).—Located at 1162 East Main Street.

Investigations of cattle grubs. R. W. Wells, associate entomologist, in charge.

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INDIANA

Vincennes

United States Entomological Laboratory (cooperation with Purdue University Agricultural Experiment Station).—Located at 1237 Fairground Avenue.

Investigations of the more important apple and peach insects, especially the codling moth, oriental fruit moth, and San Jose scale. F. H. Lathrop, senior entomologist, in charge.

Investigations of bait traps for the oriental fruit moth. Wm. P. Yetter, jr., associate entomologist, in charge.

West Lafayette

United States Entomological Laboratory (cooperation with Indiana, Illinois, Ohio, and Michigan Agricultural Experiment Stations, Ohio State University, and Federal Bureau of Plant Industry).—Located at 500 University Street. Take the University Street car in front of the courthouse in La Fayette, crossing the Wabash River. The car stops at Fifth Street directly in front of the laboratory, which occupies the entire building.

Investigations of the Hessian fly, jointworms, cutworms, grasshoppers, and wireworms. C. M. Packard, senior entomologist, in charge; mail address, Box 495.

IOWA

Sioux City

United States Entomological Laboratory (cooperation with North Dakota and Montana Agricultural Experiment Stations).—Located at 2000 South St. Aubin Street.

Investigations of cutworms, the Hessian fly, grasshoppers, and other important insects affecting cereal crops. C. N. Ainslie, assistant entomologist, in charge.

JAPAN

Yokohama

Headquarters for the men in Japan searching for parasites of the Japanese beetle for introduction into the territory infested by the Japanese beetle in the United States. T. R. Gardner, associate entomologist, in charge.

Also headquarters for the collection of parasites of the European corn borer for shipment to the United States for trial establishment in the territory infested by that insect. W. B. Cartwright, entomologist, in charge; mail address, American Consulate.

KANSAS

Manhattan

United States Entomological Laboratory.—Located at the Kansas StateA gricultural College.

Study of insect control in flour mills. George B. Wagner, agent, in charge.

Wichita

United States Entomological Laboratory (cooperation with Kansas, Nebraska, Missouri, and Oklahoma Agricultural Experiment Stations).—Located at 128 South Minneapolis Avenue.

Investigations of the chinch bug, the Hessian fly, cutworms, southwestern corn borer, and white grubs. Maintenance of local experimental plots for determination of local infestation and varietal resistance. J. R. Horton, entomologist, in charge.

United States Entomological Laboratory.—Located at 2303 West Douglas Avenue.

Investigation of life history and control of the codling moth. Paul M. Gilmer, associate entomologist, in charge.

LOUISIANA

Baton Rouge

United States Entomological Laboratory (cooperation with Louisiana Agricultural Experiment Station).—Located at the agricultural experiment station at the State University.

Biology and control of various truck-crop insects of the Gulf Coast section, including the strawberry red spider and spotted cucumber beetle. C. E. Smith, associate entomologist, in charge.

Southern States Bee-Culture Field Laboratory (cooperation with the Louisiana State University).—Located on the campus of the university.

Research on package bees, queen rearing, and southern methods of honey production. W. W. Whitcomb, jr., assistant apiculturist, in charge.

Crowley

United States Entomological Sublaboratory (cooperation with the Rice Station of the Louisiana Agricultural Experimental Station).—Located at the Rice Station of the Louisiana Agricultural Experiment Station. It is 1 mile west of town on the road to Jennings.

Investigation of the sugarcane moth borer as infesting rice and of the rice water weevil; W. A. Douglas, junior entomologist, in charge; mail address, Box 164; or address T. E. Holloway, United States Entomological Laboratory, 8203 Oak Street, New Orleans, La.

Houma

United States Entomological Sublaboratory.—Investigations on the relation of insects to sugarcane diseases, dealing especially with the sugarcane beetle, snails, springtails, etc. J. W. Ingram, assistant entomologist, in charge.

Mound

United States Entomological Laboratory.—Located near the Illinois Central depot.

Investigations of malaria mosquitoes. W. V. King, senior entomologist, in charge.

New Orleans

United States Entomological Laboratory (cooperation with the New Orleans Parking Commission).—Located on the grounds of the municipal nurseries, Gentilly Road and St. Anthony Street.

A regional laboratory devoted to the insect problems of subtropical fruits and ornamental plants in the central Gulf region. Investigations of oil emulsions, especially in relation to their use against the camphor scale; analysis of the relations between scale insects and their predators. A. W. Cressman, associate entomologist, in charge; mail address, 2224 Gentilly Road.

United States Entomological Laboratory (cooperation with the Louisiana Agricultural Experiment Station).—Located at 8203 Oak Street.

Direction of investigations in the control of insects affecting sugarcane and rice, especially the sugarcane moth borer, sugarcane mealy bug, and sugarcane beetle. T. E. Holloway, senior entomologist, in charge.

Shreveport

United States Entomological Laboratory.—Located on Greenwood Road.

Investigations of pecan insects, the obscure scale, May beetles, and the pecan shuckworm. Howard Baker, assistant entomologist, in charge.

Tallulah

United States Entomological Laboratory (cooperation with the Federal Bureau of Public Roads, with the Louisiana, Texas, Oklahoma, Mississippi, Alabama, Georgia, South Carolina, and North Carolina Agricultural Experiment Stations, and with the Georgia Normal College).—The main offices of the Tallulah laboratory are located on the corner of Cedar and Dabney Streets, three blocks east along Depot Street and one block south along Cedar Street from the railroad station.

Direction of experiments on the boll weevil, cotton flea hopper and related species, cotton aphid, bollworm, and cotton leaf worm. Development of cotton dusting machinery, especially in connection with the use of airplanes. B. R. Coad, principal entomologist, in charge.

MAINE

Cherryfield

United States Entomological Laboratory (cooperation with Maine State Department of Agriculture).—Located in the property known as the Old Campbell House.

Investigation of the blueberry maggot. L. C. McAlister, jr., assistant entomologist, in charge.

MARYLAND

Silver Spring

United States Entomological Laboratory.—Located on the west margin of High Street. It may be reached from Washington, D. C., by taking car marked "Georgia and Alaska Avenues," going north on Ninth Street and transferring to a bus at the District line. Leave the bus at High Street. The laboratory is about one-half square from the bus stop.

Studies of grain pests. G. W. Ellington, assistant entomologist. Studies of household pests, Wallace Colman, associate entomologist.

Somerset

Apicultural Investigations (cooperation with the following Federal agencies: State Department, Bureau of Foreign and Domestic Commerce, National Museum, Weather Bureau, Bureau of Standards, and Bureaus of Plant Industry, Chemistry and Soils, Agricultural Economics, and Home Economics) (mail address, Bureau of Entomology, United States Department of Agriculture, Washington, D. C.).—The laboratory, apiary, and headquarters for the bee-culture investigations are located at 423 Dorsett Avenue, three blocks west of stop 4 of the electric car line on Wisconsin Avenue, north of the District of Columbia line. Telephone, Wisconsin 3041. Jas. I. Hambleton, senior apiculturist, in charge. The subdivisions of these investigations are—

Behavior of bees: Studies of the effect of various stimuli within the hive and in the field upon colony development and honey production. Jas. I. Hambleton, senior apiculturist, W. J. Nolan, apiculturist, and others.

Diseases and enemies of bees: Investigations of bee diseases and enemies and of methods for

their control. C. E. Burnside, assistant apiculturist.

Physiology of bees: Investigations by ———

Beekeeping regions: A survey of the principal beekeeping regions of the United States. E. L. Sechrist, associate apiculturist.

Demonstrations in beekeeping: Conduct of demonstrations in modern beekeeping practice, and preparation of material for use by the Extension Service workers and other workers in beekeeping. Jas. I. Hambleton, senior apiculturist, and others.

Takoma Park

United States Entomological Laboratory.—Located at 7710 Blair Road.

Studies of orchard insecticides. F. L. Campbell, entomologist, in charge.

Research on insect morphology. R. E. Snodgrass, senior entomologist, in charge.

MASSACHUSETTS

Amherst

United States Entomological Laboratory (cooperation with Federal Forest Service, the Massachusetts Agricultural College, and organizations of private timberland owners).—Located at the headquarters of the Northeastern Forest Experiment Station of the Forest Service. The office is in the Library Building of the Massachusetts Agricultural College, within walking distance of the street cars.

Investigations of the white-pine weevil, bronze birch borer, and white grubs in forest nurseries. H. J. MacAloney, assistant entomologist, in charge.

Arlington

United States Entomological Laboratory (cooperation with Massachusetts, Ohio, and Michigan Agricultural Experiment Stations, and with Dominion and Provincial Entomologists of Canada).—Conveniently accessible from Boston by means of subway and Arlington Heights car. The experimental plots are reached from the laboratory by a short automobile trip.

Biological and ecological investigations of the European corn borer, together with control experiments. General supervision of sublaboratories at Silver Creek, N. Y., Sandusky and Toledo, Ohio, and Monroe, Mich. D. J. Caffrey, senior entomologist, in charge; address, 10 Court Street.

Melrose Highlands

Gipsy Moth Laboratory (cooperation with Gipsy Moth Office, Plant Quarantine and Control Administration, 964 Main Street, A. F. Burgess, principal entomologist, in charge).—Located at 17 East Highland Avenue. Reached by railroad from North Station, Boston, the laboratory is 10 minutes' walk from the Melrose Highlands railroad station. It may also be reached by taking the electric car marked "Lowell" or "Lawrence" at Everett Elevated Terminal, Boston, and leaving the car at Highland Avenue, Melrose Highlands.

Research work on the gipsy moth, the brown-tail moth, and the satin moth is being conducted relating to the introduction, establishment, dispersion, and native hosts of introduced parasites of these insects. Investigations on insecticides, effect of temperature, and other factors involved in the control of these pests. C. W. Collins, senior entomologist, in charge.

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MEXICO

Cuernavaca, Morelos

United States Entomological Sublaboratory (for cooperation see Mexico, D. F.).—Located on Rancho Amanalco.

A branch of the Mexico City laboratory. Investigations of the seasonal history of the Mexican fruit worm. ————, in charge.

Mexico, D. F.

United States Entomological Laboratory (cooperation with the Oficina para la Defensa Agricola, Secretaria de Agricultura y Fomento).—Located at Calzado Tacuba 153, San Jacinto, D. F.

Investigations on physiology and ecology of the Mexican fruit worm, W. E. Stone, associate entomologist, in charge. H. H. Darby, entomologist, in charge of research.

Investigations and collection of parasites and other natural enemies of the Mexican bean beetle. B. J. Landis, assistant entomologist, in charge; or address N. F. Howard, 151 West Eleventh Avenue, Columbus, Ohio.

MICHIGAN

Ann Arbor

United States Entomological Labratory (cooperation with University of Michigan and Federal Forest Service).—Located at the school of forestry and conservation, University of Michigan.

Investigations of the spruce bud worm, larch sawfly, and jack pine sawfly. S. A. Graham, collaborator, in charge.

Monroe

United States Entomological Sublaboratory (cooperation with Michigan Agricultural Experiment Station).—Located at 308 West Elm Street. Inquiry by telephone will bring an automobile for visitors.

Biological and control experimental work on the European corn borer. Maintenance of experimental plots for testing varieties of corn in relation to infestation, etc. Philip Luginbill, associate entomologist, in charge; mail address, Drawer 359.

MISSISSIPPI

Biloxi

United States Entomological Laboratory (cooperation with State Plant Board of Mississippi and Alabama State Department of Agriculture).—Located at 112 East Jackson Street. Telephone, Biloxi 476.

Investigations of the biology of the sweetpotato wireworm and control of the sweetpotato weevil. K. L. Cockerham, associate entomologist, in charge; mail address, Box 205.

Gulfport

United States Entomological Laboratory.—Located at 700 Hardy Avenue, and may be reached by Pass Christian interurban car from Gulfport. Telephone, Gulfport 869–J.

Biological and control studies of the vegetable weevil in the Gulf coast region. M. M. High, associate entomologist, in charge; mail address, Box 989.

MISSOURI

Webster Groves

United States Entomological Laboratory (cooperation with Missouri Agricultural Experiment Station).—Located at 527 Ivanhoe Place. Both the Frisco and Missouri Pacific Railroads have stations in Webster Groves within walking distance of the laboratory. Inquiry at the stations will furnish the most reliable directions for reaching the laboratory. Inquiry by telephone of the laboratory is especially suggested.

Biological and ecological investigations of billbugs affecting cereal and forage crops, and also of the Hessian fly and sunflower insects. A. F. Satterthwait, associate entomologist, in charge.

MONTANA

Bozeman

United States Entomological Laboratory (cooperation with the Montana Agricultural Experiment Station and with other experiment stations of the Northwest).—Located on the campus of the Montana Agricultural College.

Investigations of the grasshoppers and crickets affecting cereal and forage crops. J. R. Parker, senior entomologist, in charge; mail address, United States Entomological Laboratory.

NEBRASKA

Halsey

United States Entomological Laboratory (cooperation with Federal Forest Service).—Located temporarily at United States Forest Service headquarters, Nebraska National For-

est, within walking distance of the railroad station.

Investigations of the pine tip moth affecting pine plantations. L. G. Baumhofer, assistant entomologist, in charge.

NEW JERSEY

Moorestown

United States Entomological Laboratory (cooperation with the New Jersey Department of Agriculture).—Located on Flynn Avenue, Park Boulevard, and Parker Avenue.

Headquarters for investigations of the Japanese and Asiatic beetles, and parasites of the oriental fruit moth, and plant disinfection experiments and studies. L. B. Smith, principal entomologist, in charge.

NEW MEXICO

Estancia

United States Entomological Laboratory (cooperation with New Mexico Agricultural Experiment Station).—Located at the corner of Inverness Avenue and Sixth Street.

Biological and control studies of the Mexican bean beetle under western conditions. J. R. Douglass, associate entomologist, in charge; mail address, Box 353.

NEW YORK

Babylon

United States Entomological Laboratory (cooperation with the Federal Bureau of Plant Industry).—Located on the grounds of the Rubino estate, North Deer Park Avenue, about 1 mile north of the village.

Investigations of the lesser bulb flies, the narcissus fly, bulb mites, and insects affecting ornamental plants. F. J. Spruijt, assistant entomologist, acting in charge; mail address, Box 786.

Geneva

United States Entomological Sublaboratory (cooperation with New York (Geneva) Agricultural Experiment Station).—Located at the agricultural experiment station.

Studies on the Mexican bean beetle and miscellaneous bean insects. Rodney Cecil, assistant entomologist, in charge. Information can be obtained through P. J. Parrott; or address N. F. Howard, United States Entomological Laboratory, 151 West Eleventh Avenue, Columbus, Ohio.

Silver Creek

United States Entomological Sublaboratory (cooperation with Cornell Agricultural Experiment Station, State Entomologist, and State Department of Farms and Markets).—Located at 17 Division Street.

Biological and control experimental work on the European corn borer in the eastern Lake region. Maintenance of experimental plots where various cultural and other methods are tested. L. B. Scott, assistant entomologist, in charge.

Westbury

United States Entomological Sublaboratory (for cooperation see Moorestown, N. J.).—Located in the Hill Building, Post and Winthrop Avenues; telephone, Westbury 729. Westbury is reached by the Long Island Branch of the Pennsylvania Railroad.

Investigations of the Asiatic beetle. H. C. Hallock, associate entomologist, in charge.

Yonkers

United States Entomological Sublaboratory (cooperation with the Boyce Thompson Institute).—Located at the Boyce Thompson Institute.

Investigations of the European corn borer. M. E. Ryberg, agent.

NORTH CAROLINA

Asheville

United States Entomological Laboratory (cooperation with Federal Forest Service).—Located at Bent Creek, reached by trolley from Asheville.

Studies of the bark beetles affecting southern pines. R. A. St. George, in charge; mail address, 612 City Hall.

Chadbourn

United States Entomological Laboratory (cooperation with the Federal Bureaus of Plant Industry and Chemistry and Soils).—Located on Highway No. 50. Telephone, 332.

Biological and control studies of miscellaneous vegetable insects of the southeastern coastal plain, including the strawberry weevil, the seed corn maggot, the strawberry root aphid, the Porto Rican mole cricket, and wireworms. W. A. Thomas, assistant entomologist, in charge; mail address, Box 146.

NORTH DAKOTA

Fargo

United States Entomological Laboratory (cooperation with the State College Experiment Station).—Located at the station.

Investigations of the cattle grubs. Wesley G. Bruce, assistant entomologist, in charge.

OHIO

Columbus

United States Entomological Laboratory (cooperation with Ohio Agricultural Experiment Station through Ohio State University).—Located at 151 West Eleventh Avenue, opposite the State university. Telephone, University 0995.

Biological and control experiments on the Mexican bean beetle and other bean insects including the bean leaf hopper. N. F. Howard, senior entomologist, in charge.

Sandusky

United States Entomological Laboratory (cooperation with Ohio Agricultural Experiment Station).—Located in the Bliss Building.

Investigations of the grape berry moth, grape leaf hoppers, and other grape insects. G. A. Runner, associate entomologist, in charge.

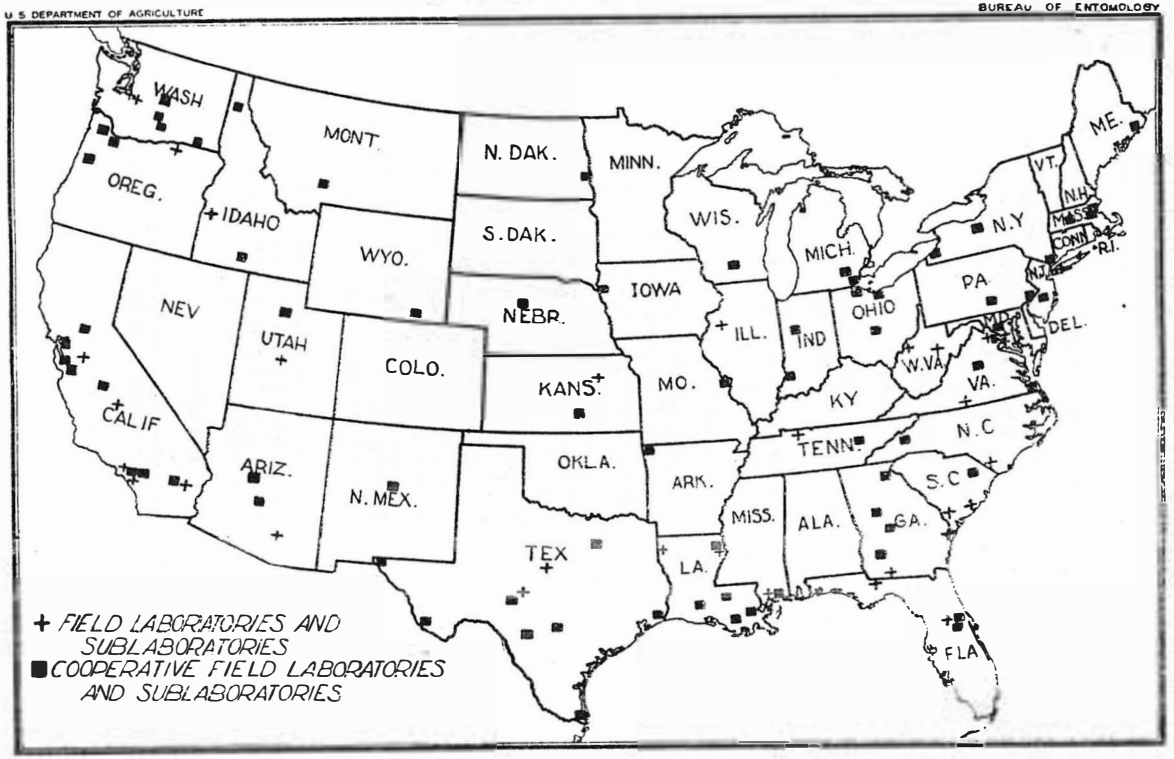
United States Entomological Sublaboratory (cooperation with Ohio Agricultural Experiment Station).—Located at 1122 Fifth Street.

Biological and control experimental work on the European corn borer. Maintenance of experimental plots for testing varieties of corn in relation to infestation, etc. L. H. Patch, associate entomologist, in charge.

Toledo

United States Entomological Sublaboratory (cooperation with Ohio and Illinois Agricultural Experiment Stations and with the Federal Bureau of Public Roads).—Located at 615 Front Street.

Biological and control experiments on the European corn borer. Maintenance of experi-



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mental plots for testing varieties of corn as to their relative resistance to infestation. Morris Schlosberg, assistant entomologist, in charge; mail address, 615 Front Street.

OREGON

Corvallis

United States Entomological Laboratory (cooperation with Idaho and Oregon Agricultural Experiment Stations).

Investigations of the pea weevil. A. O. Larson, entomologist, in charge.

Forest Grove

United States Entomological Laboratory (cooperation with Oregon State Board of Horticulture and Oregon Agricultural Experiment Station).—Forest Grove is from 23 to 24 miles west of Portland and is reached by the Southern Pacific Railroad, the West Side electric line, the Oregon Electric Railway (Forest Grove branch), by bus, and by the West Side and Tualatin Highways. The laboratory is reached from the center of Forest Grove, at the intersection of Main Street and Pacific Avenue, by proceeding three blocks north on Main Street, turning left on Third Avenue North, and proceeding west on Third Avenue North for three blocks. The laboratory is at the head of Third Avenue North and faces east.

Investigations of the Hessian fly, wheat midge, jointworms, the lesser clover-leaf weevil, and other important cereal and forage insects. L. P. Rockwood, entomologist, in charge.

Hermiston

United States Entomological Sublaboratory.—Investigations of the sugar-beet leaf hopper in

relation to vegetable crops. O. A. Hills, junior entomologist, in charge; mail address, Box 173; or address P. N. Annand, Box 1100, Twin Falls, Idaho.

Portland

United States Entomological Laboratory (cooperation with Federal Forest Service, National Park Service, and Office of Indian Affairs, and with organizations of private owners of forest land).—Located at 501 Lewis Building, within walking distance of street cars.

Investigations of the western pine beetle, the mountain pine beetle, the hemlock looper, and the hemlock bud moth and methods for their control. F. P. Keen, entomologist, in charge.

PENNSYLVANIA

Carlisle

United States Entomological Laboratory (cooperation with Pennsylvania State Department of Agriculture and Pennsylvania Agricultural Experiment Station).—Located at 624 West Louther Street.

Investigations of the Hessian fly and its parasites and the wheat stem sawfly. Maintenance of experimental plots for varietal tests and determination of local infestation. C. C. Hill, associate entomologist, in charge.

Philadelphia

United States Entomological Laboratory (cooperation with the University of Pennsylvania).—Located in the Zoology Department of the University of Pennsylvania, Thirty-sixth Street and Woodland Avenue.

Experiments on the physiological action of various insecticides. D. E. Fink, entomologist, in charge.

PERU

Trujillo

United States Entomological Laboratory.

Headquarters for the collection and shipment of parasites of the sugarcane moth borer. These parasites are for liberation and trial establishment in Louisiana and the neighboring States. H. A. Jaynes, associate entomologist, in charge; mail address, care of W. R. Grace & Company.

SOUTH CAROLINA

Charleston

United States Entomological Laboratory.—Located at the Customhouse.

Investigations of sand flies. W. E. Dove, associate entomologist, in charge.

Fairfax

United States Entomological Laboratory.

Investigation of the sandy-land wireworm and other wireworms affecting vegetable crops and tobacco in the eastern coastal plain. J. N. Tenhet, assistant entomologist, in charge; mail address, Box 126.

Florence

United States Entomological Sublaboratory (cooperation with South Carolina Agricultural Experiment Station).—Located at the Pee Dee substation of the South Carolina Agricultural Experiment Station.

Investigation of the boll weevil. F. F. Bondy, assistant entomologist, in charge; or address B. R. Coad, United States Entomological Laboratory, Tallulah, La.

TENNESSEE

Clarksville

United States Entomological Laboratory.—Reached from either the Louisville & Nashville or the Tennessee Central Railroad station by taking a car marked "Greenwood Avenue," transferring at the intersection of Madison Street and Greenwood Avenue, and getting off the car on Greenwood Avenue at Crossland Avenue. The laboratory is at 642 Greenwood Avenue and faces Crossland Avenue. Telephone, Clarksville 55.

Direction of investigations in the control of insects injurious to tobacco, including an investigation of the attraction of the tobacco hornworms to chemicals. A. C. Morgan, entomologist, in charge; mail address, Box 346.

Harriman

United States Entomological Laboratory (cooperation with the Tennessee Agricultural Experiment Station).—Located at 909 Crescent Street.

Investigations of the more important peach insects in the southern Appalachian Mountain districts, including the plum curculio, the oriental fruit moth, etc. H. G. Butler, assistant entomologist, in charge.

TEXAS

Beaumont

United States Entomological Sublaboratory (cooperation with the Texas Agricultural Experiment Station).—Located at agricultural substation No. 4.

Experiments in control of the sugarcane moth borer as a pest of corn; also studies of the sugar-

cane beetle. A. I. Balzer, assistant entomologist, in charge; or address E. V. Walter, Box 1077, San Antonio, Tex.

Brownsville

United States Entomological Sublaboratory (for cooperation see Tallulah, La.).—To reach the laboratory from the railroad station turn right (to the east) along Levee Street and go two blocks to Fourteenth Street. Turn to the left up Fourteenth Street and proceed north to Lincoln Street (about 12 blocks). Turn to the right on Lincoln Street and go one block north to the laboratory, which is on the corner of Lincoln and Sixteenth Streets.

Investigation of the cotton flea hopper and cotton leaf worm. T. C. Barber, assistant entomologist, in charge; telephone; or address B. R. Coad, United States Entomological Laboratory, Tallulah, La.

Brownwood

United States Entomological Sublaboratory.—Located on the Jim Hogg Boulevard, 250 feet south of the Brownwood water-pump station.

Investigations of the pecan nut case-bearer and the pecan shuckworm, with special emphasis on the parasites of these insects. C. B. Nickels, associate entomologist, in charge.

Dallas

United States Entomological Laboratory (cooperation with Federal Bureaus of Animal Industry and Chemistry and Soils and with the Texas Agricultural Experiment Station).—Located at 4529 Reiger Avenue. Take Junius Heights street car from down town, get off at street stop Colson, and walk one block north. Telephone, U 3920.

Investigations of insects injurious to animals, especially the screw worm and related flies. E. W. Laake, associate entomologist, in charge; mail address, Box 208.

El Paso

United States Entomological Laboratory (cooperation with Texas Agricultural Experiment Station).—Located at 3112 Douglas Street.

Investigations of the pink bollworm of cotton. F. A. Fenton, senior entomologist, in charge; or address B. R. Coad, United States Entomological Laboratory, Tallulah, La.

Menard

United States Entomological Laboratory.—Investigations of the screw worm, especially control by trapping. H. E. Parish, agent, in charge, under supervision of E. W. Laake, Dallas, Tex.

Presidio

United States Entomological Laboratory (cooperation with the Texas Agricultural Experiment Station).—Located on the east side of Wilson Street, one and one-half blocks from O'Reilly Street.

Investigations of the pink bollworm of cotton. W. L. Owen, jr., entomologist, Texas Agricultural Experiment Station, in charge.

San Antonio

United States Entomological Laboratory (cooperation with the Texas and Oklahoma Agricultural Experiment Stations and the Federal Bureau of Biological Survey).—Can be reached by street car.

Investigations of the sorghum midge, grasshoppers, the green bug, etc. E. V. Walter, associate entomologist, in charge; mail address, Box 1077.

Sonora

United States Entomological Laboratory (for cooperation see Dallas, Tex.).—Reached by train to San Angelo on the Gulf, Colorado & Santa Fe Railway either via Texas & Pacific to Sweetwater, Tex., or via Temple, Tex. After reaching San Angelo inquire for the Sonora-Del Rio bus line. Sonora is 67 miles from San Angelo. Coming by the Southern Pacific Railroad, stop at Del Rio, Tex., and take the same bus line to Sonora, 133 miles.

After reaching Sonora inquire at the McDonald Hotel or telephone 119. If Mr. Babcock is not at home, telephone 2722, Texas Agricultural Experiment Station, 27 miles from town.

Investigations of goat lice, the screw worm, and the sheep scab mite. O. G. Babcock, assistant entomologist, in charge.

Uvalde

United States Entomological Laboratory (for cooperation see Dallas, Tex.).—To reach this laboratory from the railroad station it is necessary to take a bus. From the Southern Pacific Railroad station take the street leading to town south for three-fourths of a mile, then one block west, one block south, and one-half block west. From the San Antonio, Uvalde & Gulf Railroad station it is 3 blocks east, 1 mile north to Loma Vista Avenue, and one-half block west. From places in the center of town it is one block west to High Street, 1 mile north to Loma Vista Avenue, and one-half block west.

Investigations of the screw worm and its parasites, and of insects affecting poultry. D. C. Parman, associate entomologist, in charge.

UTAH

Richfield

United States Entomological Sublaboratory.—Located in the Young Block Building. Telephone 26.

Investigations of the sugar-beet leaf hopper and its effect on sugar-beet culture in southern Utah. E. W. Davis, assistant entomologist, in charge; mail address, Box 342; or address P. N. Annand, Box 1100, Twin Falls, Idaho.

Salt Lake City

United States Entomological Laboratory (cooperation with the Utah, Wyoming, Montana, Colorado, Idaho, Nevada, and Oregon Agricultural Experiment Stations, and with the United States Army Air Service).—Located at 473 Fourth Avenue.

Investigations of the alfalfa weevil and its natural enemies. George I. Reeves, senior entomologist, in charge.

VIRGINIA

Charlottesville

United States Entomological Laboratory (cooperation with Virginia and South Carolina Agricultural Experiment Stations and Federal Bureau of Plant Industry).—Located about 1 mile from town and reached by automobile.

Investigations of the corn ear worm and joint-worms. Maintenance of experimental plots for determination of varietal resistance of corn to

ear-worm injury. W. J. Phillips, senior entomologist, in charge.

Danville

United States Entomological Laboratory.—Located at 515 Jefferson Street.

Investigations of the tobacco beetle. W. D. Reed, associate entomologist, in charge.

East Falls Church

United States Entomological Laboratory.—Reached by 45-minute trolley ride from the electric railway station, corner of Twelfth Street and Pennsylvania Avenue NW., Washington, D. C.

Investigations of general forest-insect problems, particularly life-history work and experimental control of insects injurious to forest products, especially termites, the red-shouldered bostrichid, and Lyctus powder-post beetles. R. A. St. George, associate entomologist, in charge.

Norfolk

United States Entomological Sublaboratory (cooperation with the Virginia Truck Experiment Station).—Located at the Virginia Truck Experiment Station.

Biological and control studies of the Mexican bean beetle. L. W. Brannon, assistant entomologist, in charge; or address N. F. Howard, United States Entomological Laboratory, 151 West Eleventh Avenue, Columbus, Ohio.

Rosslyn

United States Entomological Laboratory (cooperation with the Federal Bureau of Plant Industry).—Located at the Arlington Farm of the United States Department of Agriculture.

Investigations of insects in relation to diseases of alfalfa and other forage and cereal crops. F. W. Poos, senior entomologist, in charge.

Investigations of berry insects and their relation to disease transmission. C. H. Popenoe, associate entomologist, in charge; mail address, Bureau of Entomology, Washington, D. C.

Investigations of insects affecting mushrooms. O. E. Gahm, assistant entomologist, in charge; mail address, Bureau of Entomology, Washington, D. C.

WASHINGTON

Puyallup

United States Entomological Laboratory.—Located at 819 Fifteenth Street, NW. Telephone, 484.

Biological and control investigations of the European earwig under urban and rural conditions. S. E. Crumb, entomologist, in charge; mail address, Box 233.

Sumner

United States Entomological Laboratory.—Located on the grounds of the Pierce County farm, 1½ miles from the center of Sumner. Follow Orting Road out of Sumner, turning to the left at forks of road about 1 mile out; road sign points to "County Farm."

Investigations of the lesser bulb flies, the narcissus fly, bulb mites, and insects attacking ornamental plants. C. F. Doucette, associate entomologist, in charge.

Toppenish

United States Entomological Sublaboratory (cooperation with State College of Washington).—Located approximately halfway between Toppenish and Buena on the paved highway. If the laboratory is called by telephone (Top-

penish 208), a car will meet visitors at either of these places.

Investigations of irrigated-land wireworms affecting potatoes and other crops of the reclamation areas. F. H. Shirck, assistant entomologist, in charge; mail address, Box 448; or address M. C. Lane, Walla Walla, Wash.

Walla Walla

United States Entomological Laboratory (cooperation with State College of Washington).—Located 3 miles west of Walla Walla on Wallula Road and near Orchard Station on the Milton Interurban Railway.

Investigations of irrigated-land and related wireworms. M. C. Lane, associate entomologist, in charge; mail address, Box 616. Telephone, 1050.

Wenatchee

United States Entomological Sublaboratory (cooperation with the Federal Bureau of Plant Industry and with the Washington Agricultural Experiment Station).—Located in the courthouse annex.

Investigations of the woolly apple aphid in relation to perennial canker of apple. M. A. Yothers, associate entomologist, in charge.

Yakima

United States Entomological Laboratory (cooperation with the Federal Bureaus of Chemistry and Soils and of Plant Industry, and with the Washington Agricultural Experiment Station).—Located at 605 South Sixteenth Avenue.

Investigations of the codling moth, San Jose scale, and other important apple insects, and studies of insecticides. E. J. Newcomer, senior entomologist, in charge.

WEST VIRGINIA

French Creek

United States Entomological Laboratory.—May be reached from the Baltimore & Ohio Railroad station at Adrian, W. Va., or from Buckhannon, W. Va. From Adrian the visitor may travel by automobile over a hard road south 2 miles to the village of French Creek, then south 1 mile over the Bush Run clay road to the laboratory.

From the railroad station at Buckhannon travel is south over the French Creek road, through Adrian, to the village of French Creek, 10 miles, thence via the Bush Run road to the laboratory, which is 1 mile off the main highway which connects Charleston, W. Va., with Clarksburg, Pittsburgh, and eastern cities.

Investigations of chestnut weevils and other nut insects. Fred E. Brooks, associate entomologist, in charge.

Mineral Wells

United States Entomological Laboratory.—Located at Kanawha Farms, a short ride from Parkersburg, W. Va., on the Baltimore & Ohio Railroad.

Investigations in bioclimatics. A. D. Hopkins, principal entomologist, in charge.

WISCONSIN

Madison

United States Entomological Laboratory (cooperation with Wisconsin, Indiana, New York, New Jersey, and Maryland Agricultural Experiment Stations, and the National Canners' Association).—Located at 1532 University

Avenue, on the campus of the University of Wisconsin.

Biological and control studies of vegetable insects of the North Central States, including especially the pea aphid, the onion maggot, and the striped cucumber beetle. J. E. Dudley, entomologist, in charge.

WYOMING

Laramie

Intermountain States Bee-Culture Laboratory (cooperation with the University of Wyoming).—Located on the campus of the university.

Research on intermountain methods of beekeeping. A. P. Sturtevant, associate apiculturist, in charge.

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